

14th Appleton Space Conference Thursday 6th December 2018

08.45 – 09.25 **Registration and Refreshments – R22 Lecture Theatre Foyer**

Session 1: Chair - Prof Chris Mutlow, Director, STFC RAL Space

- 09.30 – 09.40 **Welcome**
Prof Chris Mutlow
- 09.40 – 10.00 **Future Programme and Challenges**
Dr Graham Turnock, Chief Executive, UK Space Agency
- 10.00 – 10.20 **Exploring the Universe: Synergies in the ESA Science Programme**
Prof Günther Hasinger, Director of Science, ESA
- 10.20 – 10.40 **Space Applications in the Industrial Strategy Challenge Fund**
Andy German, Lead Satellite Applications, Innovate UK
- 10.40 – 11.00 **Highlights from the Cassini Spacecraft Mission to Saturn and its Moons**
Prof Michele Dougherty, FRS, CBE, FRAS, Imperial College London
- 11.05 – 11.25 Refreshments Break – R22 Lecture Theatre Foyer
- 11.30 – 11.50 **UK Cold Atom Sensors: a Fast Track Demonstrator**
Andy Vick, Head of Disruptive Technology, STFC RAL Space; Steve Maddox, Systems Engineer, Teledyne e2v
- 11.50 – 12.10 **The Skyrora Launch Programme**
Richard Osborne, Programme Manager, Skyrora
- 12.10 – 12.30 **A Review of the Recommendations of the COSPAR Roadmap on Small Satellites**
Dr Alan Title, Senior Fellow, Lockheed Martin
- 12.30 – 12.50 **Sun, Space and Art: Reaching Out to Schools**
Dr Helen Mason, OBE, University of Cambridge
- 12.50 – 13.50 Buffet Lunch – R22 Lecture Theatre Foyer

Session 2: Chair – Dr Gillian Wright, Director, STFC UK Astronomy Technology Centre

- 13.55 – 14.15 **Space Environment and Microgravity Science in the UK**
Libby Jackson, Human Spaceflight and Microgravity Programme Manager, UK Space Agency
- 14.15 – 14.35 **Sample Return**
Dr Rain Irshad, Autonomous Systems Group Leader, STFC RAL Space
- 14.35 – 14.55 **Pioneering High-Frequency Commercial Lunar Missions**
Jamie Denniston, Lead Spacecraft System Engineer, ispace Inc

14.55 – 15.15 **Mission to Mercury**
Prof Emma Bunce, Professor of Planetary Plasma Physics, University of
Leicester

15.20 – 15.40 Refreshments Break – R22 Lecture Theatre Foyer

Session 3: Chair – Dr Joanna Hart, Harwell Space Cluster Development Manager, STFC

15.45 – 16.05 **Millimetre-Wave Technologies for Future Radio Astronomy Observatories**
Prof Danielle George, MBE, FIET, Vice Dean of Teaching and Learning,
University of Manchester

16.05 – 16.25 **Ocean Colour Contributions to Meeting Sustainable Development
Goals**
Dr Shubba Sathyendranath, Plymouth Marine Laboratory, UK

16.25 – 16.45 **Space Applications of Novel Laser Systems and Quantum Technology
Systems**
Dr Graeme Malcolm OBE, Chief Executive, M Squared Lasers Ltd

16.45 – 17.05 **Astroscale: Developing a Comprehensive Solution for Space Debris
Removal**
Nobu Okada, Founder and CEO, Astroscale

17.10 – 17.20 Short Break – R22 Lecture Theatre Foyer

Session 4: 14th Appleton Keynote Lecture; Chair – Prof Chris Mutlow, Director, STFC RAL Space

17.25 – 18.15 **Plastics in Our Oceans - a Major Environmental Threat or Just an
Embarrassment?**
Dr Simon Boxall, Principal Teaching Fellow within Ocean and Earth Science,
National Oceanography Centre, University of Southampton

18.20 – 18.30 **Presentation and Conclusion**
Prof Chris Mutlow

18.30 – 19.15 Reception for all participants – R22 Lecture Theatre Foyer